

49-27700, 27720, 17-Up Super Duty 7" Lift w/ Radius Arm Drops

IF your ReadyLIFT<sub>®</sub> product has a damaged or missing part, please contact customer service directly and a new replacement part will be sent to you immediately. For warranty issues, please return to the place of installation and contact ReadyLIFT.

# (877) 759-9991

MON-FRI 7AM-4PM PST

OR

EMAIL: support@readylift-ami.COM

WEBSITE: ReadyLIFT.COM

\*\*Please retain this document in your vehicle at all times.\*\*

### **Limited Lifetime Warranty**

This unique product warranty proves our commitment to the quality and reliability of every product that ReadyLIFT manufactures. The ReadyLIFT product warranty only extends to the original purchaser of any ReadyLIFT product, if it breaks, we will give you a new part. Warranty does not apply to discontinued parts.

Our Limited Lifetime Warranty excludes the following ReadyLIFT items; bushings, bump stops, ball joints, tie rod ends, heim joints and shock absorbers. These parts are subject to wear and are not considered defective when worn. They are warranted for 12 months from the date of purchase for defects in workmanship.

This product warranty is voided if the vehicle is not aligned after kit installation and proper maintenance is routinely done.

Product purchased directly from ReadyLIFT has a 90 day return policy on uninstalled products from the date of purchase (may be subject to restocking fee). Uninstalled product returns must be in the original Ready-LIFT packaging. Please call **(877) 759-9991** to get an RGA# for any return. Customer is responsible for shipping costs back to ReadyLIFT. <u>Returns without RGA# will be refused.</u> Contact ReadyLIFT directly about any potentially defective parts prior to removal from vehicle.

ReadyLIFT products are **NOT** intended for off-road abuse. Any damage or failure as a result from off-road abuse voids the warranty of the ReadyLIFT product. ReadyLIFT is **NOT** responsible for any subsequent damages to any related vehicle parts due to misuse, abuse, improper installation, or lack of maintenance. Furthermore, ReadyLIFT reserves the right to change, modify or cancel this warranty without prior notice.



#### **R**EAD INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING INSTALLATION.

INSTALLATION BY A <u>CERTIFIED PROFESSIONAL MECHANIC</u> IS HIGHLY RECOMMENDED.

#### **READYLIFT**® IS **NOT** RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.

#### Safety Warning

MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH.

Suspension systems or components that enhance the on and off-road performance of your vehicle may cause it to handle differently than it did from the factory. Extreme care must be used to prevent loss of control or vehicle rollover during abrupt maneuvers.

Always operate your vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to driver and passengers.

Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers. ReadyLIFT Suspension does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your vehicle under the influence of alcohol or drugs.

Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every off-road use.

It is the responsibility of the retailer and/or the installer to review all state and local laws, with the end user of this product, related to bumper height laws and the lifting of their vehicle before the purchase and installation of any ReadyLIFT products.

It is the responsibility of the driver/s to check their surrounding area for obstructions, people, and animals before moving the vehicle.

All raised vehicles have increased blind spots; damage, injury and/or death can occur if these instructions are not followed.

#### **Installation Warning**

All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two post vehicle lift with safety jacks.

Use caution during all disassembly and assembly steps to insure suspension components are not over extended causing damage to any vehicle components and parts included in this kit.

Included instructions are guidelines only for recommended procedures and are not meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications.

ReadyLIFT Suspension recommends the use of an OE Service Manual for model/year of vehicle when disassembly and assembly of factory and related components.

Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OE Service Manual.

Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort.

Larger tire and wheel combinations may increase leverage on suspension, steering, and related components.

Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

# **IMPORTANT NOTE:**

This suspension system was developed using a  $38'' \times 12.5''$  tire with  $20'' \times 9''$  wheel and a offset of +25mm. If wider tires are used, offset wheels may be necessary and trimming may be required. Factory wheels can be used but are not recommended with tires over 11.5'' wide.

The stock spare rim can be run in an emergency - exercise extreme caution under stock spare tire operating conditions. Please note that, if running the spare factory tire, it is done for short distances and a speed not to exceed 45mph or damage to differentials may occur.

A lifted vehicle may have different headlight aim performance. ReadyLIFT recommends marking and recording the headlight beam position before kit installation and then adjusting, if necessary, the headlamps to the same height settings after kit installation. Set the vehicle on a level surface 10' to 15' from a solid wall or garage door. (This is a general distance with some manufacturers requiring different distances.) Note the top height of the low beam's bright spot, the top of the most intense part of the beam, for driver and passenger side. Height may vary from side to side. Repeat this procedure and adjust after lift kit is installed. Adjust if the aim is off by turning the adjusters gradually (a quarter of a turn) and looking to see where the new alignment falls. It may be easier to block one headlamp while adjusting the other. Consult the owner operation manual for procedures to adjust headlights - many automakers offer headlight aiming specs. Some states have their own specifications when it comes to headlight aim, so it's best to follow those rules when alighting headlights.

# **IMPORTANT NOTE:**

This kit was designed using the standard frame option vehicle. Vehicles that have been equipped with snow prep / ambulance packages will not see the same lift height gained as they come 1" to 1.5" taller from the factory due to heavier rated front springs. The lift height achieved is 6" to 8" over the standard frame option vehicles depending on the kit purchased. The springs provided in this kit are not designed to carry snow plow package and may see decreased front end heights, if done.

Due to differences in factory spring length between model years, vehicles made before model year 2021, with standard duty springs, may only exhibit a 6.5" increase in ride height.

The lift blocks in this kit are not designed to work with aftermarket or factory add on air spring/load leveling kits that attach to the bump stop tangs. Use of this type of air bag system will void all block warranties and can cause failure of the block bump stop tang.

## **Pre Installation Measurements**

It is imperative that you record the following measurements and factory components. ReadyLIFT test and records as much data from each application as possible. Vehicle manufactures may change components or add models with different options. By recording and not exceeding the fender to hub center that ReadyLIFT call out will ensure the lift on your vehicle is correct. This measurements and components will effect the completion of this lift kit. Failure to do so may result in over lifting, causing premature failure of axles, CV boots and drivetrain. Over lifting a vehicle will also result in a incorrect wheel alignment. This will prematurely wear tires on the inside or outside edges. Incorrect alignment will cause poor vehicle handling issues such as under steer. Over lifting will also cause a shock top off condition, which may create poor ride quality, damage the vehicle, introduce noises like clunks, and will prematurely wear key components. Failure to adjust head lamps may cause dangerous driving conditions for you and other drivers on the road. Record the head lamp position before the installation of this lift or leveling kit and adjusting to factory position after the completion will ensure a safe and enjoyable experience.

### **RECORD HEAD LAMP MEASURMENTS**

Driver	Driver	Passenger	Passenger
Before	After	Before	After

#### **VEHICLE RIDE HEIGHT MEASURMENTS** Measure from the fender edge to the axle hub center

Factory front axle	Factory rear axle	
ReadyLIFT target	ReadyLIFT target	
After Lifted	After Lifted	

# **BILL OF MATERIALS**

7" Lift Spring	2	5/16"- 18 X .75" Hex Head Bolt GR 8	2
Drop Pitman Arm	1	5/16"- 18 C-Lock Nut GR 8	2
		5/16" Flat Washer GR 8	4
Caster Correction Bushing Kit	1	7/16"- 14 x 1.5" Hex Head Bolt GR 8	4
Track Bar Bracket	1	7/16"- 14 C-Lock Nut GR 8	4
Track Bar Washer	2	7/16" Flat Washer GR 8	8
Front Bump Stop Extension	2	M8 - 1.25 x 70mm Hex Head Bolt GR 8.8	2
Driver Radius Arm Drop	1	M8 Flat Washer GR 8.8	2
•		M12 - 1.75 x 70 mm Hex Head Bolt GR 10.9	2
Passenger Radius Arm Drop	1	M12 - 1.75 x 55 mm Hex Head Bolt GR 10.9	1
Radius Arm Crush Sleeve	4	M12 - 1.75 x 50 mm Hex Head Bolt GR 10.9	4
Front Sway Bar Drop Bracket Left Hand Side	1	M12 - 1.75 x 35 mm Hex Head Bolt GR 10.9	5
Front Sway Bar Drop Bracket Right Hand Side	1	M12 - 1.75 C-Lock Nut GR 10.9	7
		M12 Flat Washer GR 10.9	19
Driver Brake Line Bracket	1	M18 - 2.5 x 130 mm Hex Head Bolt GR 10.9	4
Pass Brake Line Bracket	1	M18 - 2.5 C-Lock Nut GR 10.9	4
Steering Stabilizer Bracket (tie rod)	1	M18 Flat Washer (Thick) GR 10.9	8
Steering Stablizer Bracket (frame)	1	M16 - 2.0 x 445 mm x 8.22 mm U-Bolt	4
		M16 - 2.0 Locking Flange Nut	8
Steering Stabilizer Cone Washer	1	6″ Zip Tie	2
Rear Sway Bar Bracket	2		
6.5" Driver Block	1	ONLY FOR 2-PIECE DRIVESHAFT:	
6.5" Pass Block	1	Carrier Bearing Drop	1
Front Shock	2	7/16"-14 x 2.25" Hex Head Bolt GR 8	2
Rear Shock	2	7/16" Flat Washer	2
Steering Stabilizer	1		



**Before starting installation:** ReadyLIFT Suspension highly recommends that the installation of this product be performed by a professional mechanic with experience working on and installing suspension products. Professional knowledge and skill will typically yield the best installation results. If you need an installer in your area, please contact ReadyLIFT Suspension Customer Service to find one of our "Pro-Grade" Dealers.

#### **INSTALLATION BY A PROFESSIONAL IS HIGHLY RECOMMENDED.**

- A Factory Service Manual for your specific Year / Make / Model is highly recommended for reference during installation.
- All lifted vehicles may require additional driveline modifications and / or balancing.
- A vehicle alignment is REQUIRED after installation of this product.
- Speedometer / Computer recalibration is required if changing +/- 10% from factory tire diameter.
- A vehicle lift or hoist greatly reduces installation time. Installation time estimates are based on an available vehicle hoist.
- Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation.

\*\*\*Parts shown in red for picture clarification only\*\*\* ReadyLIFT recommends all steps and procedures described in these instructions be performed while the vehicle is properly supported on a two post vehicle lift with safety jacks.

Otherwise, park vehicle on a clean flat surface and block the rear wheels for safety. Engage the parking brake.

Disconnect the vehicle power source at the ground terminal on the battery.

Lock the steering wheel in the straight forward position with the column lock or steering wheel locking device.

Raise the front of the vehicle and support with safety jack stands at each frame rail behind the lower control arms.

Remove front wheels/tires using care to prevent personal injury - wheel/tire assembly is verv

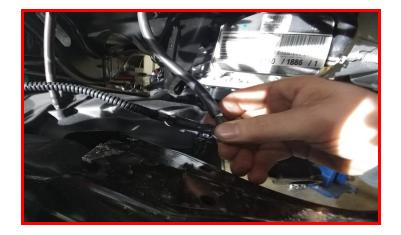
Remove the brake line bracket at the frame. Retain factory hardware.



Remove the brake line bracket at the axle. Retain factory hardware.



Remove the vacuum line clips from the driver side radius arm.



Remove the axle vent line tube from the top of the driver side shock and the inside frame rail.



Remove the vacuum line clip from the passenger side engine cross member.

Mark the drive shaft to pinion orientation, then remove the drive shaft from the front differential. Tape the u joint caps to keep them from falling off / damage while working. Retain factory hardware.

Remove the transfer case skid plate. Retain factory hardware.



Leave the axle hanging from the shocks. Place a suitable jack under the tie rod ends close to the knuckles.



Remove the radius arms at the frame. Retain factory hardware.

Use the jack to rotate the axle up allowing the radius arms to drop out of the frame low enough to clear the ReadyLIFT radius arm drops.

Support the transmission cross member with a suitable jack. Work on one side at a time, remove the cross member bolts. They will be used to mount the radius arm drops. Retain factory hardware.

Install the ReadyLIFT radius arm drop bracket into the frame using M18 x 130mm bolts, washers, crush sleeve, nuts and the factory cross member bolts. Do not tighten at this time. Move the jack holding the cross member to the opposite side and repeat above steps.







Rotate the axle by lowering the jacks un-der the tie rod ends until you can line up the radius arms into the ReadyLIFT drop brackets. Install using factory hardware. Do not tighten at this time. Torque the transmission cross member bolts to 40 ftlbs.



Remove the jacks from under the tie rod ends and place under the axle.



Remove the sway bar from the frame and let hang. Retain factory hardware.

Remove the track bar at the track bar bracket. Let hang out of the way. Retain factory hardware.



Remove the tie rod end at the pitman arm. Strike the pitman arm with a dead blow hammer to dislodge the taper. Retain factory hardware.



Remove the steering stabilizer from the frame. Retain factory hardware.

Remove the steering stabilizer nut from the tie rod. Use an air hammer or other suitable device to dislodge the taper.

Remove the shock from the axle. Retain factory hardware.





Lower the axle enough to remove the front springs. Remove the shock from the frame. Discard factory shocks and springs.



Remove the factory bump stop by grabbing and pulling it out of its mount using a twisting/pulling motion. Retain factory bump stop.

lip of the bump stop mount parallel to the

Mark a line across the edge of the outer frame. Remove the bump stop mount from the frame.

Install the ReadyLIFT bump stop extension to the frame by threading it into the existing bolt hole. Úse a punch or similar tool in the holes of the mount and tighten. Install the bump stop mount to the extension using M8 nut and washer.





Remove the bump stop mount and use a suitable cutting device, trim off the marked edge. This is for spring clearance under suspension full droop and articulation. Paint the exposed metal with a guality rust preventative paint.



Re-install bump stop mount to the Ready-LIFT extension making sure the cut edge faces to the outside of the vehicle. Torque to 5 ft-lbs.

Remove factory track bar bracket by removing the 2 vertical bolts and 3 horizon-

tal bolts. Retain factory hardware.

Remove the pitman arm nut. Using a pitman arm puller, remove the pitman arm from the gear box. Clean off any debris off the sector shaft. Coat the sector shaft splines with a light duty liquid based lubricant or oil.





Install the ReadyLIFT pitman arm using the factory nut. Remove the nut, and clean off any lubricant from the sector shaft and pitman arm nut threads and apply a liberal amount of thread locker. Run tight. Use a chain or other suitable strap through the pitman arm tie rod mounting hole to the passenger side frame rail to keep gear box from turning. Torque the pitman arm nut to 450 ft-lbs.

Install the ReadyLIFT track bar mount to the frame using factory hardware. Torque to 120 ft-lbs.





Install the factory isolator onto the Ready-LIFT springs, and then the springs onto the axle making sure to clock the dead end of the spring into the spring lock. Raise the axle enough to hold the springs into place.

Install the track bar into the ReadyLIFT track bar mount using the factory hardware and the ReadyLIFT offset square washers. Make sure the offset is closest to the driver side, as shown.



Loosen the tie rod adjuster and flip the tie rod 180 degrees and install to the Ready-LIFT pitman arm using factory hardware. Torque to 70 ft-lbs. Install the safety keeper and cotter pin.

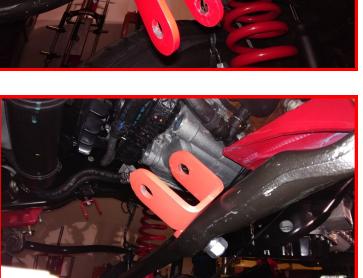
Install the ReadyLIFT steering stabilizer bracket to the frame using M12 x 35mm bolt and washer. Do not tighten until the stabilizer has been test fit so as to establish the brackets final orientation.

Install the ReadyLIFT steering stabilizer bracket to the tie rod using M12 x 55mm bolt, washers, cone adapter, and nut. Cone adapter will install from the bottom going up. Do not tighten at this time. The stabilizer must be test fit to establish the bracket's final orientation.

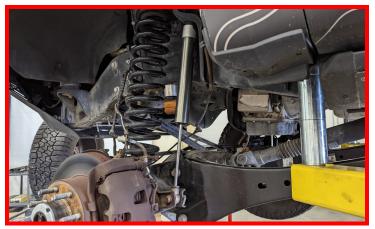
Install the steering stabilizer to the brackets using M12 x 70mm bolts, washers, and nuts. Mark the orientation of the brackets to the tie rod end and frame mount. Remove the stabilizer. Torque the mount hardware to 45 ft-lbs. Reinstall the steering stabilizer and torgue hardware to 45 ft-lbs







Install aftermarket front shock to the axle. Torque upper hardware to 35 ft-lbs. Do not tighten lower hardware at this time.



Make a mark 2.5" below the original vacuum line mount on the passenger side engine cross member. Drill a hole using 3/8" drill bit. DO NOT drill into the oil pan. Install the vacuum line clip into the newly drilled hole.

Locate the forward hole on the driver side spring mount on the bottom of the frame rail. Drill into frame rail using 3/8" drill bit. Install the differential vent line clip into the hole.



Zip tie the driver side vacuum line to the vent tube making sure that it can not be pinched by the bump stop when the suspension cycles.



Install the ReadyLIFT brake line extensions to the factory brackets using 5/16" x 3/4" bolts, washers, and nuts. Install bolts facing outwards.

Driver side: gently pull down on the metal line until you can get the ReadyLIFT bracket to line up with the factory holes.

Passenger side: gently unbend the metal line until you can line up the ReadyLIFT bracket locking tang into the original bolt hole. Make sure to not kink the metal line. Install using factory hardware. Torque to 5 ft-lbs. Do not over tighten and strip the threads.

Install the ReadyLIFT sway bar brackets to the frame using factory hardware. Torque to 45 ft-lbs.

Install sway bar to brackets using provided hardware. Torque to 45 ft-lbs.

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Install the front wheels. Lower the vehicle to the ground. Torque the lug nuts to the wheel manufacturers specs. Jounce the vehicle a few times to settle it to the new ride height. Install the front drive shaft using the factory hardware with a drop of thread locker. Torque to 26 ft-lbs, then the upper shock hardware to 30 ft-lbs, the lower shock hardware to 65 ft-lbs, the radius arm hardware to 200 ft-lbs, track bar at the bracket to 350 ft-lbs.

Block the front tires and raise the rear of the vehicle using a suitable jack. Support with jack stands at each frame rail in front of the rear leaf spring hangers.





If your vehicle is equipped with a rear sway bar, remove the brackets from the frame and let the sway bar hang out of the way. Retain factory hardware.

Support the axle with a suitable jack. Remove the rear shocks from the axle and frame. Retain factory hardware.

Loosen but do not remove the passenger side u-bolts. Remove the driver side ubolts completely and lower the axle.

Install the ReadyLIFT driver side block (D is cut into the block under the bump stop tang) and raise the axle lining the center pins up. Install using the provided u-bolts and nuts but do not fully tighten at this time. Repeat steps for the passenger side. (P is cut into the block under the bump stop tang)









ry hardware. Do not tighten at this time.

If the vehicle is equipped with the factory sway bar, install the ReadyLIFT rear sway bar brackets to the frame using factory hardware. Torque to 45 ft-lbs.

Install the factory sway bar bracket to the ReadyLIFT drop bracket using M12 x 35mm bolts, washers, and nuts. Torque to 45 ft-lbs.

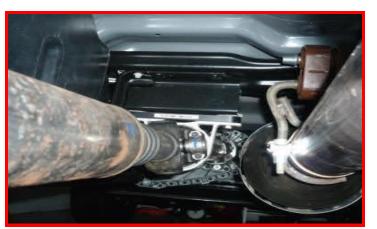
If equipped with a 2 piece driveline, remove the bolts holding the carrier bearing to the frame. Install the ReadyLIFT carrier bearing spacer between the carrier bearing and frame using 7/16" bolts, washers and a drop of thread locker. Torque to 50 ft-lbs.

Install the extended length rear shocks using factory hardware. Make sure to install in the proper orientation for the shock that you have (inverted or standard mount). Do not tighten at this time. Install the wheels and lower the vehicle to the ground.

Torque the lug nuts to the wheel manufacturers specs. Jounce the vehicle to settle it to the new ride height. Torque the shock hardware to 65 ft-lbs, and the u-bolts to 110 ft-lbs. Reconnect the vehicle power source at the ground terminal on both batteries. Have the alignment set to factory specs. Adjust steering wheel center and toe before driving or you could have dash warning lights come on.









#### FAILURE TO PERFORM THE POST INSPECTION CHECKS MAY RESULT IN VEHICLE COMPONENT DAMAGE AND/OR PERSONAL INJURY OR DEATH TO THE DRIVER AND/OR OTHERS.

#### Final Checks & Adjustments

Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to ensure proper torque. Torque lug nuts to the wheel manufacturer specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels completely left then right and verify adequate tire, wheel, brake line, and ABS wire clearance. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brakes hoses and ABS lines for adequate slack at full extension, adjust as necessary.

# RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT EACH SERVICE INTERVAL THERAFTER.

#### Vehicle Handling Warning

Increasing the height of your vehicle raises the center of gravity and can affect stability and control. Use caution on turns and when making steering corrections.

Vehicles with larger tires and wheels will handle differently than stock vehicles. Take time to familiarize yourself with the handling of your vehicle.

#### Wheel Alignment/Headlamp Adjustment

It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. Align the vehicle to factory specifications. It is recommended that your vehicle alignment be checked after any off-road driving.

In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment. If the vehicle is equipped with active or passive safety/collision monitoring and/or avoidance systems including, but not limited to, camera- or radar-based systems, check and adjust your vehicle's systems for proper aim and function.

	Driver	Passenger	Tolerance	Total / Split
Camber	-0.3	-0.3	+/- 0.5	+0.0
Caster	+3.0	+3.0	+/- 0.5	+0.0
Тое	+.07	+.07	+/-0.05	+.14

### **RECOMMENDED ALIGNMENT SPECS**